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(71) Applicant (for DE only): PHILIPS INTELLECTUAL PROPERTY & STANDARDS GMBH [DE/DE]; Stein-damm 94, 20099 Hamburg (DE).

(71) Applicant (for all designated States except DE, US): KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): DEPPE, Carsten

[DE/DE]; c/o Philips Intellectual Property & Standards GmbH, Weiss hausstr. 2, 52066 Aachen (DE). DÜR-BAUM, Thomas [DE/DE]; c/o Philips Intellectual Property & Standards GmbH, Weiss hausstr. 2, 52066 Aachen (DE). SAUERLÄNDER, Georg [DE/DE]; c/o Philips Intellectual Property & Standards GmbH, Weiss hausstr. 2, 52066 Aachen (DE).

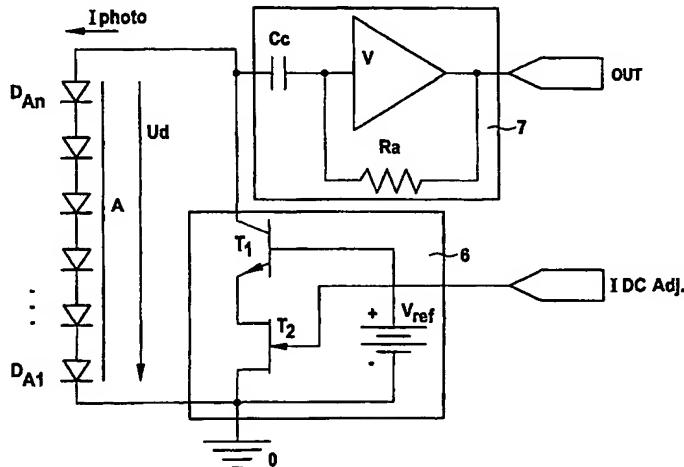
(74) Agent: MEYER, Michael; Philips Intellectual Property & Standards GmbH, Weiss hausstr. 2, 52066 Aachen (DE).

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[Continued on next page]

(54) Title: CIRCUIT ARRANGEMENTS AND METHODS FOR A REMOTE CONTROL RECEIVER HAVING A PHOTODIODE



(57) Abstract: A control unit (2) of a remote control receiver sets the forward or reverse direction operating mode of the photodiode (1) as a function of the useful signal level of its output signal, and to be precise, during standby, the photovoltaic operating mode (forward mode), since in this mode no external bias current is required. If the useful signal level of the photodiode (1) exceeds a predefined threshold, the reverse mode is set, and this brings with it a higher sensitivity. A series circuit (A) of a number of identical photodiodes D_{A1}... D_{An} in the forward mode allows the realization of a controlled current source (6) having a transistor (T), since the permissible diode voltage (Ud) of the overall arrangement may have n times the value of the operating voltage of an individual photodiode. Thus at the same time the voltage across the individual diodes can be set to a very low value and a favorable operating range for the current source can be set. The possible sensitivity of the receiver module having diodes in this operating mode can thereby be considerably increased.

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SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 889 605 A (BOISSEAU DANIEL ET AL) 30 March 1999 (1999-03-30) column 3, line 56 – column 4, line 10 column 4, line 36 – column 5, line 17	1-7
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A	abstract; figure 3	1-7
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A	EP 0 666 657 A (NOKIA TECHNOLOGY GMBH) 9 August 1995 (1995-08-09) column 4, line 50 – line 57 abstract	1, 4, 8, 12

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Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Baas, G

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